



Substitute Form PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 06666-156001	Application No. 10/676,377
<b>Information Disclosure Statement</b> <b>by Applicant</b> <small>(Use several sheets if necessary)</small> <small>(37 CFR §1.98(b))</small>		Applicant <b>Ulrich Neumann et al.</b>		
		Filing Date September 30, 2003	Group Art Unit 2621	

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
Ew	AA	6,078,701	06/20/2000	Hsu et al.			
Ew	AB	6,269,175	07/31/2001	Hanna et al.			
Ew	AC	6,430,304	08/06/2002	Hanna et al.			
Ew	AD	6,490,364	12/03/2002	Hanna et al.			
Ew	AE	6,512,857	01/28/2003	Hsu et al.			
Ew	AF	6,522,787	02/18/2003	Kumar et al.			
Ew	AG	6,571,024	05/27/2003	Sawhney et al.			
Ew	AH	6,597,818	07/22/2003	Kumar et al.			
Ew	AI	2001/0019621	09/06/2001	Hanna et al.			
Ew	AJ	2001/0036307	11/01/2001	Hanna et al.			
Ew	AK	2001/0038718	11/08/2001	Kumar et al.			
Ew	AL	2001/0043738	11/22/2001	Sawhney et al.			
Ew	AM	2002/0061131	05/23/2002	Sawhney et al.			
Ew	AN	2003/0014224	01/16/2003	Guo et al.			
Ew	AO	2003/0080978	05/01/2003	Navab et al.			
Ew	AP	2003/0085992	05/08/2003	Arpa et al.			

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AQ							
	AR							

**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
Ew	AS	Bolan Jiang et al., "A Robust Hybrid Tracking System for Outdoor Augmented Reality", Integrated Media Systems Center, University of Southern California
Ew	AT	Joseph R. Spann et al., "Photogrammetry Using 3D Graphics and Projective Textures", IAPRS, Vol. XXXIII, Amsterdam, 2000
Ew	AU	Brett Hall et al., "A Novel Graphical Interface and Context Aware Map for Incident Detection and Monitoring", 9th World Congress on Intelligent Transport Systems, October 2002

Examiner Signature

Date Considered

4/28/03

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EW	AV	Ulrich Neumann et al., "Visualizing Reality in an Augmented Virtual Environment", Integrated Media Systems Center, University of Southern California	
EW	AW	R. Azuma, "A Survey of Augmented Reality", Presence: Teleoperators and Virtual Environments, Vol. 6, No. 4, pp. 355-385, 1997	
EW	AX	P.E. Debevec, C.J. Taylor and J. Malik, "Modeling and Rendering Architecture from Photograph: A Hybrid Geometry-and-Image-based Approach", SIGGRAPH' 96, pp. 11-20, 1996	
EW	AY	E. Foxlin. "Inertial Head-Tracker Sensor Fusion by a Complementary Separate-Bias Kalman Filter", IEEE Virtual Reality Annual International Symposium, pp. 184-194, 1996	
EW	AZ	C. Fruh and A. Zakhor, "3D Model Generation for Cities Using Aerial Photographs and Ground Level Laser Scans", IEEE Conference on Computer Vision and Pattern Recognition, 2001	
EW	AAA	R.C. Gonzales, R.E. Woods, Digital Image Processing. Addison-Wesley, 2 <sup>nd</sup> edition (September 1993), pp. 41-44	
EW	ABB	N. Greene, M. Kass, and G. Miller, Hierarchical Z-Buffer Visibility. SIGGRAPH' 93, pp. 231-238, 1993	
EW	ACC	A. Gruen and R. Nevatia (editors), "Special Issue on Automatic Building Extraction from Aerial Images", Computer Vision and Image Understanding, November 1998	
EW	ADD	P. Haeblerli and M. Segal, "Texture mapping as a fundamental drawing primitive", in M. F. Cohen, C. Puech, and F. Sillion, editors, Fourth Eurographics Workshop on Rendering, pp. 259-266, 1993	
EW	AEE	M. Harville, G. Gordon, and J. Woodfill, "Foreground Segmentation using Adaptive Mixture Models in Color and Depth", Proceedings of the IEEE Workshop on Detection and Recognition of Events in Video, July 2001	
EW	AFF	W. Heidrich and H.P. Seidel, "Realistic, Hardware-accelerated Shading and Lighting", SIGGRAPH' 99, 1999	
EW	AGG	Y. Hsieh, "SiteCity: A semi-automated Site Modeling System", IEEE Conference on Computer Vision and Pattern Recognition, pp. 499-506, 1996	
EW	AHH	R. Jain, R. Kasturi, B.G. Schunck, Machine Vision, McGraw-Hill International Edition, 1995, pp 76	
EW	AII	B. Jiang, U. Neumann, "Extendible Tracking by Line Auto-Calibration," International Symposium on Augmented Reality, pp. 97-103, New York, October 2001	
EW	AJJ	T. Kanade, R. Collins, A. Lipton, P. Burt and L. Wixson, "Advances in cooperative multi-sensor video surveillance", Proc. Of DARPA Image Understanding Workshop, Vol. 1 pp. 3-24, 1998	
EW	AKK	T. Kanade, P. Rander, S. Vedula, and H. Saito, Mixed Reality, Merging Real and Virtual Worlds, Yuichi Ohta, Hideyuki Tamura, ed., Springer-Verlag, 1999, pp. 41-57	
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EW	AMM	R. Kumar, H.S. Sawhney, Y. Guo, S. Hsu, and S. Samarasekera, "3D Manipulation of Motion Imagery" Proceedings of International Conference on Image Processing (ICIP'2000), Vancouver, Canada, Sept. 2000	
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EW	AOO	U. Neumann and S. You, "Augmented Virtual Environments (AVE): for Visualization of Dynamic Imagery", IEEE Virtual Reality'03, pp. 61-67. Los Angeles, CA, March 2003	
EW	APP	U. Neumann and S. You, "Natural Feature Tracking for Augmented-Reality", IEEE Transactions on Multimedia, Vol. 1, No. 1, pp. 53-64, March 1999	

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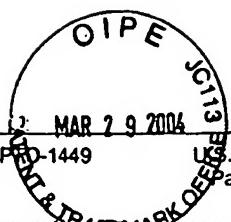
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EW	ARR	R. Remagnino, A. Baumberg, T. Grove, D. Hogg, T. Tan, A. Worrall, and K. Baker, "An integrated traffic and pedestrian model-based vision System". Proceedings of BMVC97, Vol. 2, pp. 380-389, 8, September, 1997	
EW	ASS	W. Ribarsky, T. Wasilewski, and N. Faust, "From Urban Terrain Models to Visible Cities", IEEE Computer Graphics & Applications, Vol. 22, No. 4, 2002	
EW	ATT	C. Ridder, O. Munklet, and H. Kirchner, "Adaptive background estimation and foreground detection using Kalman-filtering". ICRA'95, pp. 193-199, 1995	
EW	AUU	M. Segal, C. Korobkin, R. Van Widenfelt, J. Foran, and P. Haeblerli, "Fast shadows and lighting effects using texture mapping", SIGGRAPH '92, pp. 249-252, 1992	
EW	AVV	J. R. Spann and K. S. Kaufman, "Photogrammetry using 3D graphics and projective textures", IAPRS 2000, Vol. 33	
EW	AWW	C. Stauffer, W.E.L. Grimson, "Adaptive background mixture models for real-time tracking" CVPR 99, Vol. 2, pp. 246-252, June 1999	
EW	AXX	H. Tao, H. S. Sawheny, R. Kumar, "Dynamic layer representation with applications to tracking", Proc. IEEE conf. on Computer Vision and Pattern Recognition, CVPR 2000, Vol. 2, pp. 134-141, June 2000	
EW	AYY	S. J. Teller and C. H. Seouin, "Visibility preprocessing for interactive walkthroughs", SIGGRAPH '91, pp. 61-69, 1991	
EW	AZZ	S. You, J. Hu, U. Neumann, and P. Fox, "Urban Site Modeling From LiDAR", Second International Workshop on Computer Graphics and Geometric Modeling CGGM'2002, pp. 579-588, Montreal, CANADA, 2002	
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EW	ABBB	Z. Zhang, "A flexible new technique for camera calibration", IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 22, No. 11, pp. 1330-1334, 2000	
EW	ACCC	Ulrich Neumann et al., "Augmented Virtual Environments (AVE): Dynamic Fusion of Imagery and 3D Models", Integrated Media Systems Center, University of Southern California	
EW	ADDD	P. E. Debevec, Y. Yu and G. D. Borshukov, "Efficient View-Dependent Image-Based Rendering with Projective Texture-Mapping", 9 <sup>th</sup> Eurographics Workshop on Rendering, pp. 105-116, 1998	
EW	EEEE	D. Liebowitz, A. Criminisi and A. Zisserman, "Creating Architectural Modeling From Images", EUROGRAPHIC'99, pp. 39-50, 1999	
EW	AFFF	Foley, J. D., Van Dam, A., Feiner, S. K. and Hughes, J. F., "Computer Graphics: principles and practice", Addison-Wesley, Reading, Massachusetts, 1990	
EW	AGGG	M. J. Zyda and D. R. Pratt, "NPSNET: A Multilayer 3D Virtual Environment Over the Internet", Proceedings of the ACM- 1995 Symposium on Interactive 3D Graphics, 9-12 April 1995, Monterey, California	
EW	AHHH	Cruz-Neira, C., Sandin, D. J. and DeFanti, T. A., "Surround-Screen Projection-Based Virtual Reality: The Design and Implementation of the CAVE" SIGGRAPH'93, 1993	
EW	AIII	B. Curless, and M. Levoy, "A volumetric method for building complex models from range images", SIGGRAPH'96, pp. 303-312, 1996	

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<i>Gu</i>	AJJJ	Mark, W. R., Mcmillan, L. and Bishop, G. Post-rendering 3D warping. ACM Symposium on Interactive 3D Graphics, pp. 7-16, 1997
<i>QW</i>	AKKK	Zhao, B. and Trinder, J., "Integrated Approach Based Automatic Building Extraction", 19 <sup>th</sup> ISPRS Congress, Book 3B, pp. 1026-1032, Amsterdam
<i>QW</i>	ALLL	Seresht, M. And Azizi, A., "Automatic Building Recognition from Digital Aerial Images", 19 <sup>th</sup> ISPRS Congress, Book 3B, pp. 792-798, Amsterdam
<i>QW</i>	AMMM	Coorg, S. and S. Teller, "Extracting Textured Vertical Facades from Controlled Close-Range Imagery", CVPR, 1999, pp. 625-632
<i>tu</i>	ANNN	A. Elasksher, J. Bethel, "Building Extraction Using Lidar Data", ASORS-ACSM Annual Conference and FIG XXII Congress, April 22-26, 2002
<i>CW</i>	AOOO	Haala, N., C. Brenner, "Generation of 3D city models from airborne laser scanning data", the 3 <sup>rd</sup> EARSEL Workshop on LIDAR Remote Sensing on Land and Sea, Tallinn, 105-112, 1997
<i>CW</i>	APPP	Suya Y., Ulrich N., Automatic Object Modeling for 3D virtual Environment, Proceedings of NMBIA, pp. 21-26, 1998
<i>CW</i>	AQQQ	William, H., Saul, A., William, T., and Brian, P., "Numerical Recipes in C", Cambridge University Press, 1992
<i>EN</i>	ARRR	<a href="http://www.cybercity.tv">http://www.cybercity.tv</a>

Examiner Signature <i>Gu</i>	Date Considered <i>04/28/05</i>
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Sheet 1 of 1

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	AA						
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Foreign Patent Documents or Published Foreign Patent Applications							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation
							Yes No
	AL						
	AM						
	AN						
	AO						
	AP						

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
EVR	AQ	A. Brogni et al., "Technological Approach for Cultural Heritage: Augmented Reality", Proceedings of the 1999 IEEE, International Workshop on Robot and Human Interaction, Sept. 1999
EVR	AR	P.D. Crouser et al., "Unattenuated tracer particle extraction through time-averaged, background image subtraction with outlier rejection", Experiments in Fluids 22 (1997)- XP-000727469
EVR	AS	Carla Nardinocchi et al., "Building extraction from LIDAR data", IEEE/ISPRS Joint Workshop on Remote Sensing and Data Fusion over Urban Areas, 2001, XP-002271137
	AT	

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